

REMARKS

This is in response to the Final Office Action mailed on July 9, 2007. Claims 1, 3-18, and 20-43 are pending in the application. Claims 21-36 and 38-42 have been withdrawn from consideration. Claims 2, 11, and 19 have been cancelled. Applicant respectfully requests reconsideration of the application.

Independent claims 1 and 37 are amended herein to recite that the label comprises a print layer overlying the upper surface of the polymer facestock. Support for this amendment may be found in original claim 11 and page 31, line 5 to page 33, line 6. Applicant respectfully requests that the Examiner enter the amendments, which are believed to put the application in better condition for allowance or appeal.

Claim Rejections Based on U.S. Patent No. 4,070,225

The Examiner maintained the rejections based on U.S. Patent No. 4,070,225 (Batdorf) either alone or in combination with other references. For the following reasons, Applicant submits that the claims are patentable over Batdorf alone or in combination with the cited references.

A. Batdorf fails to anticipate the claims

The Examiner maintained the rejection of claims 1, 3, 4, 17, and 18 under 35 U.S.C. § 102(b) as being anticipated by Batdorf. The Examiner stated that Batdorf teaches a two-part, high solids curable adhesive compositions that are curable without application of an external energy source. Applicant respectfully disagrees with the Examiner's position.

Batdorf relates to a method for forming epoxy adhesive-bonded joints between a plurality of substrates. The adhesive system in Batdorf does include an epoxide prepolymer and a primary-amine terminated polyamide curing agent. Batdorf, however, still fails to teach every feature recited in the claims.

Batdorf fails to teach a two-part adhesive composition that is curable without the application of an external energy source. Batdorf explicitly discloses that its adhesive is a one-part, two-component adhesive. ('225 patent, column 6, lines 4-5.) Further, Batdorf teaches that its adhesive composition will not cure "until heat and/or pressure are applied." ('225 Patent, Abstract, lines 3-7.) The adhesive in Batdorf is unreactive until exposed to epoxide cure initiation conditions, which are attained by heating the adhesive to a temperature above the ring and ball softening point of the polyamide. ('225 Patent, column 6, lines 15-20; column 2, lines 34-37; column 9, lines 11-17.) Thus, Batdorf explicitly requires the application of an external energy source for its adhesive to be curable. Therefore, Batdorf fails to teach or suggest a label that comprises an adhesive layer where the adhesive is a two-part adhesive that is curable without application of an external energy source. For at least these reasons, Batdorf fails to teach every feature set forth in independent claim 1 and fails to anticipate the claims.

In the Final Office Action, the Examiner acknowledges that Batdorf's adhesive is activated using heat. The Examiner, however, states that heat is used to activate Batdorf's adhesive and that Batdorf discloses that the adhesive cures under normal ambient conditions even after the initiation conditions have been removed. (Final Office Action, page 12, citing column 2, lines 20-22.) Even if Batdorf's adhesive continues curing under ambient conditions, the adhesive still requires heat to effect curing. That is, Batdorf requires application of an external energy source for the adhesive to cure. Therefore, Batdorf fails to teach an adhesive that is curable without application of an external energy source and fails to anticipate the claims.

The Examiner also contends that the adhesive in Batdorf is curable without application of external energy because (i) the chemistry of Batdorf's adhesive is the same as Applicant's, and (ii) Batdorf discloses that the epoxide and amine phases may be in intimate contact prior to coating the adhesive and the kinetics and thermodynamics of the system "may permit some curing" or "permit premature

curing." (Citing '225 patent, column 7, lines 24-30.) This disclosure, however, does not teach an adhesive composition that is curable without application of an external energy source. First, despite containing similar components, as Applicant has shown, Batdorf's adhesive is not a two-part adhesive curable without application of external energy but is a one-part adhesive that requires heat to effect curing.

Second, the disclosure at column 8 does not teach adhesive curable without application of external energy. Columns 6-8 in Batdorf disclose preparing the one-part adhesive of that invention. For example, Batdorf discloses that the adhesive may be formed by uniformly distributing epoxide prepolymer in a polyamide solution that includes a polyamide and a solvent. This mixture is applied to a substrate and the solvent allowed to evaporate to provide an adhesive film that is "a mixture of unreacted epoxide prepolymer and polyamide." (Column 7, lines 1-8.) Further, this film can be stored until mating substrates "under epoxy cure initiation conditions, i.e., until it is subjected to heating." (Column 7, lines 20-24.) Thus, when the disclosure is viewed as a whole, it is clear that Batdorf does not teach an adhesive composition that is curable without application of an external energy source.

Additionally, Batdorf fails to teach a facestock having a print layer overlying the upper surface of the polymer facestock as recited in Amended Claim 1.. Batdorf relates to using a bonding adhesive as a substitute for welding to bond metal substrates together. ('225 patent, column 1, lines 49-57; column 8, lines 57-59.) All the examples in Batdorf demonstrate bonding aluminum substrates together. There is nothing in Batdorf to teach a facestock with a printing layer.

For the reasons described above, Batdorf fails to teach the identical invention in as complete detail as contained in the claims and fails to anticipate the claims. (MPEP § 2131.) Applicant respectfully requests that the rejection be withdrawn.

B. The claims are not obvious in view of Batdorf alone or in combination with other references.

The Examiner rejected (i) claim 6 under 35 U.S.C. § 103(a) as being obvious over Batdorf in view of U.S. Patent No. 5,536,800 (Scholz); (ii) claims 7, 8, and 37 as obvious over Batdorf in view of U.S. Patent No. 5,863,624 (Miyazaki et al.); (iii) claim 9 as obvious in view of Batdorf; and (iv) claim 43 as being unpatentable over Batdorf in view of U.S. Patent No. 3,723,223 (Le Compte). Applicant respectfully disagrees with the Examiner's statements.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or references when combined, must teach or suggest all the claim limitations. (MPEP § 2143.) The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure. (*Id.*) The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. (MPEP § 706.02(j).)

As discussed above, Batdorf fails to teach or suggest all the features recited in claim 1. Specifically, Batdorf fails to teach a label with (i) a two-part adhesive composition that is curable without application of an external energy source or (ii) a printing layer overlying a surface of the facestock. Since Batdorf fails to teach all the features of claim 1, claim 1 is also not obvious in view of Batdorf. Any claim depending from an non-obvious independent claim is also non-

obvious. (MPEP § 2143.03.) Therefore, claims 6-9 and 43, which depend from claim 1, are also not obvious in view of Batdorf.

Further, as amended, independent claim 37 recites that the adhesive is curable without the application of an external energy source. Therefore, for the reasons discussed above, claim 37 is also patentable over Batdorf.

1. *Claim 6 is patentable over Batdorf and Scholz*

The Examiner only relies on Scholz for teaching the use of a particular adhesive coat weight. At the least, Scholz does not make up for Batdorf's failure to teach or suggest an adhesive that is curable without application of an external energy source. Therefore, the combination of Batdorf and Scholz fails to teach the invention of claim 6 (which includes all the limitations of claim 1).

2. *Claims 7, 8, and 37 are patentable over Batdorf and Miyazaki*

The Examiner contends it would be obvious to use the polyester film from Miyazaki in Batdorf's invention. As discussed above, Batdorf requires application of external energy to cure its adhesive. The Examiner only relies on Miyazaki for disclosing an adhesive layer over a polyester film such as PET. Miyazaki teaches a thermosetting resin adhesive formed of an epoxy resin and a trimellitic acid anhydride hardener. To obtain strong adhesion of the polyester film of Miyazaki to the metal sheet, the metal sheet and polyester film are placed in an oven to cure the thermosetting resin adhesive. (See '624 patent, column 13, lines 45-51.) That is, Miyazaki also requires application of external energy to cure its adhesive. Therefore, Miyazaki fails to make up for the deficiencies in Batdorf, and the combination of Batdorf and Miyazaki fail to teach or suggest every limitation in the claims. Consequently, claims 7, 8, and 37 are not obvious in view of Batdorf and Miyazaki.

3. *Claim 43 is patentable over Batdorf and Le Compte*

The Examiner rejected claim 43 as being unpatentable in view of Batdorf as modified by Le Compte. The Examiner contends that it would be obvious to modify the adhesive of Batdorf with a primary amine hardener such as paraphenylenediamine from Le Compte.

Batdorf and Le Compte fail to teach all the claim limitations of claim 43. Le Compte is directed to a one-component, heat curing adhesive, having a long shelf life. Le Compte discloses a carrier that is coated with a composition comprising a thermoplastic binder, discrete particles of epoxy resin, discrete particles of a heat-reactive epoxy reactive hardener, and a dispersing medium. ('223 patent, column 1, lines 31-36.) The binder is employed to reduce contact between the epoxy and the hardener particles and prevent them from reacting until heat curing during lamination. ('223 patent, column 2, lines 32-36.) Additionally, Le Compte's composition utilizes a dispersing medium (water or solvent) to decrease the concentration of reactive particles and cause the binder to surround each particle and keep it from contacting other reactive particles. (Column 2, lines 46-63.) The coated carriers may be stored for long periods of time at room temperature ('223 patent, column 4, lines 15-17.) The coated carriers are used for lamination and not as labels. Laminates are formed by hot pressing a substrate to the coated carrier, such as by inserting a coated carrier and substrate in a press at about 200°F to about 400°F at a pressure of from about 10 pounds per square inch to about 1,000 pounds per square inch. (Column 4, lines 18-34.) Thus, Le Compte requires applying an external energy source (heat) to cure their respective adhesives.

As described above, Batdorf fails to teach a label that employs an adhesive that is curable without application of an external energy source. Le Compte also requires applying external energy to cure the adhesive and fails to make up for the deficiencies in Batdorf. Therefore, the combination of Batdorf and Le Compte fails to teach the claimed invention.

For at least these reasons, claims 6-9, 37, and 43 are not obvious in view of Batdorf either alone or in combination with the cited references, and Applicant respectfully requests that the rejections of these claims be withdrawn.

Claim Rejections based on U.S. Patent 6,248,204 (Schuft)

The Examiner rejected claims 1 and 5 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,248,204 to Schuft. The Examiner stated that Schuft discloses a two-part room temperature curable thermosetting epoxy adhesive composition that includes an epoxy resin as a first component, an epoxy resin hardener such as oxyethylene diamine as a second component, and has a high solids content since the composition contains no volatile solvents. The Examiner also contends that Schuft's disclosure of bonding together substrates such as phenolic composites and, therefore, discloses a polymer facestock with an adhesive layer and reads on a label.

Applicant respectfully disagrees with the Examiner's statements. Schuft does not teach or disclose a label comprising a polymer facestock. Schuft relates to an epoxy resin composition for use in aerospace applications. The resin composition includes an epoxy resin component and an epoxy resin hardener. The epoxy resin component includes an inorganic and/or organic filler component that acts as a structural reinforcement component, a thixotropy-conferring component, or an adhesion strength-conferring component. The adhesive in Schuft is a bonding adhesive used for bonding together substrates, at least one of which is constructed of a metal or a synthetic material such as glass cloth phenolics and phenolic composites. In particular, Schuft teaches the desirability of providing adhesives that are particularly suitable for aerospace applications, such as applications to assemble the nose inlet and exit cones on, for example, the Space Shuttle, in which phenolic rings are secured to a metal housing. ('204 patent, column 1, lines 45-57.) A person skilled in the label arts would not consider a phenolic ring (to be secured to a metal housing) as a facestock for a

label. Further, Schuft fails to teach a printing layer overlying an upper surface of the polymer facestock. Therefore, Schuft fails to teach every feature of claim 1 and claims 1 and 5 are not anticipated by Schuft. Applicant respectfully requests that the rejection be withdrawn.

Claim Rejections based on U.S. Patent 4,883,697 (Dornbusch)

The Examiner rejected several claims as being obvious over Dornbusch in view of Batdorf (and in some instances in view of additional references). The Examiner rejected claims 1, 11, 12, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Dornbusch in view of Batdorf. Claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dornbusch in view of Bartdorf, and further in view of U.S. Patent No. 4,654,262 to Alonso. Claim 13 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dornbusch in view of Batdorf, and further in view of U.S. Patent No. 4,151,319 to Sackoff et al. Claim 15 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dornbusch in view of Batdorf, and further in view of U.S. Patent No. 5,380,587 to Musclow. The Examiner rejected claim 16 as being unpatentable over Dornbusch in view of Batdorf, and further in view of U.S. Patent No. 6,153,288 to Shih et al.

The Examiner states that Dornbusch discloses a thermoplastic label stratum laminated to an upper surface of stress-compensating stratum via epoxy-type urethane type adhesive. The Examiner acknowledges that Dornbusch fails to teach an adhesive layer as claimed in claim 1, but the Examiner argues that it would have been obvious to use the adhesive from Batdorf. The Examiner argues that a person skilled in the art would be motivated to use Batdorf's adhesive that has a very lengthy open time and can provide a strong bond between the label stratus and stress-compensating medium.

Applicant disagrees with the Examiner's statements. Dornbusch discloses a flexible multilayer label for application to deformable thermoplastic packages. The label (10) includes a label stratum (14) laminated to a stress-compensating

stratum (30). Stratum (14) may be laminated to stratum (30) by a one-component adhesive (20) such as an epoxy-type urethane. A surface of stress-compensating stratum (30) includes a heat-activated sealant (25) to bond the label (10) to a package. ('697 patent, column 5, lines 2-7.) Dornbusch discloses that its heat-activated sealant is a wax composition that includes ethylene-vinyl acetate copolymer. Thus, Dornbusch fails to teach or suggest a two-part curable adhesive, let alone one comprising a curing agent comprising at least one primary amine, diamine, polyamine or mixtures of two or more thereof.

In the Final Office Action, the Examiner equates adhesive layer (20), not layer (25), to the presently claimed adhesive layer and states that the claim language is open ended and does not preclude other layers being present in the label. Applicant disagrees with the Examiner's interpretation.

In Dornbusch, the label (10) comprises both stratum (14) and stratum (30). While the label is formed from by laminating stratum (14) to stress-compensating stratum (30), layers (14) and (30) do not have to be laminated by utilizing adhesive layer (20) but could be laminated by other means, such as co-extrusion or coating processes. (Column 5, lines 54-58.) Thus, the adhesive layer (20) is not even required in Dornbusch's construction.

Further, while the claims may be open ended, a person skilled in the art would recognize that the two-part curable adhesive is used to bond the claimed label to a substrate. Dornbusch discloses that stratum (30) includes a heat-activated sealant (25), that provides "the required capability" of bonding the label to a package. That is, the heat-activated sealant layer (25) of Dornbusch, not the adhesive (20), provides the bonding capability to bond the label to a package. Therefore, if any layer of Dornbusch equates to the adhesive component in the claimed label structure, it is layer (25).

Regardless of what layer the Examiner equates to the claimed adhesive layer, the claims are not obvious in view of Dornbusch and Batdorf. The Examiner acknowledges that Dornbusch fails to teach a two-part curable adhesive but relies

on Batdorf for teaching this feature. As discussed above, Batdorf does not teach a two-part curable adhesive that is curable without application of an external energy source. Rather, Batdorf discloses a one-part adhesive that requires heat to initiate curing. Consequently, the combination of Dornbusch and Batdorf still fails to teach employing an adhesive that is curable with the application of an external energy source and fails to render claim 1 obvious.

Since claim 1 is not obvious in view of the combination of Dornbusch and Batdorf, claims 11, 12, and 14, which depend from claim 1, are also not obvious.

The additional references cited by the Examiner with respect to claims 10, 13, 15, and 16 do not make up for the deficiencies in the combination of Dornbusch and Batdorf. Therefore, claims 10, 13, 15, and 16, which depend from claim 1, are not obvious in view of the combination of Dornbusch and Batdorf even when combined with the cited references.

Applicant respectfully requests withdrawal of the rejection of claims 1 and 10-16 based on Dornbusch in combination with Batdorf alone or in further view of any of the cited references.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully requests a timely issuance of a Notice of Allowance.

In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 under Attorney Docket No. **AVERP3299USA**.

Respectfully submitted,

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